USSN 09/494.088

C. REMARKS.

Currently pending in the application are claims 1-15, 17 and 18-24. Currently amended in this application are claims 2-6, 10 and 24. Claim 18 has been cancelled as a non-elected invention. Each of the Examiner's points will be answered in the order presented.

First, in the Office Action, the Examiner noted that the claims were not enabled for genetic modification or use in gene therapy. In the Interview, in agreement, the undersigned directed the Examiner to page 8 of the specification which indicated that the cells were not genetically modified: "These optimized DA neuron cells have improved dopaminergic properties arising from manipulating the hNT neuron natural capabilities. These procedures eliminated the need to transfect the cells with exogenous gene constructs." (lines 21-23) Moreover, the Examples teach only induction or up regulation of TH expression in hNT cells, not genetic transfer. The claims are not intended to cover genetically modified cells. It is believed that this ground for rejection can be withdrawn.

Second, in the Office Action, the Examiner noted that the specification stated that the reduction in rotational behavior of all transplanted rats was not statistically significant. That is correct. However, the sample was small and the dose had not been optimized. As discussed by Dr. McGrogan in his attached Declaration, whenever hNT-DA neurons were found in the rats, those rats had decreased rotational scores while animals with no surviving hNT-DA neurons (hNT-neuronal grafts and lesion only groups) did not exhibit any reduction in mean full body turns. Thus, in Dr. McGrogan's experience with the DA neurons, the DA neurons are capable of correcting the dopaminergic cell deficit produced by 6-OHDA treatment, which is an accepted model for Parkinson's disease. It is believed that this ground for rejection can be withdrawn.

Third, the Office Action noted that dependent claims 2-5 were indefinite in that they mentioned "progenitor cells", whereas, claim 1 had been amended to recite "neuronal progenitor cells." As can be seen in the Amendments section, claims 2-5 have been amended to be consistent with claim 1. The undersigned has also amended claim 10 to be consistent with claim

1. It is believed that this ground for rejection is now moot and may be withdrawn.

USSN 09/494,088

And finally, the Office Action noted that dependent claim 24 recited a duplicate "step a" and was thus indefinite. Claim 24 has been amended to recite "step d." It is believed that this ground for rejection is now most and may be withdrawn.

In view of the foregoing, reconsideration and allowance of this application are earnestly solicited. If any matters remain which can be resolved with a telephone call, the Examiner is cordially requested to contact the undersigned.

Respectfully yours,

Barbara Luther

Barbara J. Luther Reg. No. 33,954

Quarles & Brady/Streich Lang LLP 2 North Central Avenue Phoenix, AZ 85004 602-230-5502

Enclosure: Declaration of Dr. McGrogan

1754902.v1 PHX